APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 12, 2008

 $B. \quad DISTRICT\ OFFICE, FILE\ NAME, AND\ NUMBER:\ St.\ Louis\ District,\ Corsair\ Homes\ and\ Wildwood\ Town\ Center,\ MVS-2008-56-001-SNR_Tributary\ A$

C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Missouri County/parish/borough: St. Louis County City: Wildwood Center coordinates of site (lat/long in degree decimal format): Lat. 38:57:84.09° N, Long. 90:63:09.02° W. Universal Transverse Mercator: 15 North Name of nearest waterbody: Caulks Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Missouri River Name of watershed or Hydrologic Unit Code (HUC): Lower Missouri (10300200) Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
	Office (Desk) Determination. Date: Field Determination. Date(s): On February 26, 2008 reviewed the conditions of the unnamed tributary with the applicant's agent for a project known as Corsair Homes. The stream channel flows into a separate development with a current application package being reviewed by the U.S. Army Corps of Engineers, named Wildwood Town Center (MVS-2007-617). This single jurisdictional determination should satisfy the coordination requirements for both projects.
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	 b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 600 linear feet within Corsair Homes Property: 4-12 width (ft) and/or 0.14 acres. 300 linear feet within Wildwood Town Center Property Wetlands: acres in total.
	c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known):

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

2.	Non-regulated waters/wetlands (check if applicable): Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional Explain:.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW Identify TNW: .	
	Summarize rationale supporting determination: .	
2.	Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":	

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions: Watershed size: Pick List Drainage area: 130 acres Average annual rainfall: 42.1 inches Average annual snowfall: 9 inches (ii) Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. ☒ Tributary flows through 3 tributaries before entering TNW. Project waters are 10-15 river miles from TNW.

³ Supporting documentation is presented in Section III.F.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters are Project waters are S-10 aerial (straight) miles from TNW. Project waters are I-2 aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Identify flow route to TNW ⁵ : The unnamed tributary is one of the branches that comprises the headwaters of Caulks Creek. According to USGS mapping, the tributary flows and converges with other headwater streams to form Caulks Creek. Approximately 1.9 river miles downstream from the site, Caulks Creek becomes a Relatively Permanent Water. Caulks Creek flows through St. Louis County an additional 7.25 miles prior to joining waters from the Bonhomme Creek watershed. From this point, the waters flow approximately 2.32 miles prior to reaching the Missouri River. Missouri River is a Section 10 Navigable Water. Tributary stream order, if known: First/Second Order.
(b)	General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 4 - 12 feet Average depth: 2 - 4 feet Average side slopes: Vertical (1:1 or less).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain: .
enveloped in a	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Generally, the conditions of the tributary tively stable. There was some evidence of moderate erosion on some of the creek's meanders. However, the creek was a wide wooded corridor and maintained generally stable conditions. Presence of run/riffle/pool complexes. Explain: A few small pools were present within this tributary accompanied by stretches of cobbles and gravel. Tributary geometry: Meandering Tributary gradient (approximate average slope): 2%
, ,	Flow: Tributary provides for: Intermittent but not seasonal flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: A majority of this channel consists of intermittent flow characteristics. Small intermittent esent throughout the streambed during the review, appearing to be influenced by the presence of groundwater.
	Other information on duration and volume:
	Surface flow is: Discrete and confined. Characteristics: Surface flow is confined to the channel.
	Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply): ☐ Bed and banks ☐ OHWM ⁶ (check all indicators that apply): ☐ clear, natural line impressed on the bank ☐ changes in the character of soil ☐ shelving ☐ vegetation matted down, bent, or absent ☐ leaf litter disturbed or washed away ☐ sediment deposition ☐ water staining ☐ other (list): ☐ Discontinuous OHWM. Texplain: ☐ Shelving ☐ water staining ☐ changes in the character of soil ☐ destruction of terrestrial vegetation ☐ the presence of wrack line ☐ sediment sorting ☐ sediment sorting ☐ sediment sorting ☐ multiple observed or predicted flow events ☐ abrupt change in plant community ☐ other (list): ☐ Discontinuous OHWM. Explain:

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW. ⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. ⁷Ibid.

		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings; vegetation lines/changes in vegetation types. other (list):
channel	Ide:	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: The on-site channel was very well defined. During the site visit, there was several stretches that contained water. The water appeared clear. Water enters the tributary via a culvert pipe on the western property boundary. There was evidence of steepened stream banks and some minor erosion. Intify specific pollutants, if known: None observed. Due to evidence of minor erosion and the upstream piping, the stream carry silts and sediment at an elevated rate. But generally, the creek probably has a positive net benefit to downstream due to its present forested conditions.
	\boxtimes	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Within the site boundary's, the stream channel is enclosed in a dor, measuring greater than 100 feet. Wetland fringe. Characteristics:. Habitat for: Federally Listed species. Explain findings: Stripping of the environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
2. Ch	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		Versical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:.
	(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain: Surface flow is: Pick List Characteristics: Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
	(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Discrete wetland hydrologic connection. Explain:. ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
	(d)	Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii)	Cha	emical Characteristics: uracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: untify specific pollutants, if known:

(iii) Biological Characteristics. W	etland supports (check	an that apply):	
Riparian buffer. Character	istics (type, average widt	th): .	
□ Vegetation type/percent co	ver. Explain:		
☐ Habitat for:			
☐ Federally Listed species	s. Explain findings:		
Fish/spawn areas. Expl	ain findings: .		
Other environmentally-	sensitive species. Explain	in findings: .	
Aquatic/wildlife divers	ity. Explain findings:		
Characteristics of all wetlands adja	acent to the tributary (i	f any)	
All wetland(s) being considered	in the cumulative analys	sis: Pick List	
Approximately () acres in total	are being considered in	the cumulative analysis.	
E	ollowing:		
For each wetland, specify the fo	C		
, 1	C		
Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
, 1	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
, 1	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
	Riparian buffer. Character Vegetation type/percent co Habitat for: Federally Listed specie. Fish/spawn areas. Expl. Other environmentally- Aquatic/wildlife divers: Characteristics of all wetlands adj. All wetland(s) being considered Approximately () acres in total	☐ Riparian buffer. Characteristics (type, average wid ☐ Vegetation type/percent cover. Explain: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain ☐ Aquatic/wildlife diversity. Explain findings: ☐ Characteristics of all wetlands adjacent to the tributary (in the All wetland(s) being considered in the cumulative analyses Approximately (in acres in total are being considered in the cumulative analyses).	□ Riparian buffer. Characteristics (type, average width): □ Vegetation type/percent cover. Explain: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The unnamed, non-Relatively Permanent Flow Water (non-RPW) posesses features of an intermittent tributary with an ordinary high water mark (OHW). At the point where it enters the Corsair Development, the channel averages appoximately 4 feet at the bed width and approximately 2 feet for the bank height at the upstream end. However, as it enters the Wildwood Town Center development, the stream channel widens to approximately 10 to 12 feet in width. Features observed supporting clear evidence of flow and an OHW throughout the entire channel include: scour, the presence of litter and debris, the presence of wrack line, and a clear line impressed on the bank. Based on observed characteristics and its location within the Caulks Creek watershed, the unnamed tributary enters the Corsair property as a first order stream. While in the Corsair property, the channel is joined by another ephemeral stream, changing its classification to a second order stream. There is no interruption of flow or hydrologic connectivity between the unnamed tributary and the point where the other headwater stream converge to form Caulks Creek. Based on observed conditions, the unnamed tributary has the capacity to carry surface flow

hydrology via a discrete and confined channel to the point where Caulks Creek watershed joins Bonhomme Creek, and then out to the Missouri River. It has been determined that the non-RPW maintains hydrologic connectivity to Caulks Creek and the Missouri River, thereby providing a significant nexus between the non-RPW and a TNW. Hydrologic connectivity refers to the flow that transports organic matter and nutrients, energy, and aquatic organisms throughout the system (Freeman et al., 2006). The following outlines how the unnamed non-RPW maintains a significant nexus to Caulks Creek and the Missouri River through its hydrologic connectivity.

The unnamed RPW influences the chemistry and physical conditions of Caulks Creek through its transport of sediments and energy. Rainfall within this area provides a frequent pulse of hydrology, thus providing a regular source of hydrology to this creek. It is anticipated that the on-site tributary contributes to the chemical and physical make up of Caulks Creek, through its ability to convey sediments and attached nutrients during these pulses. As previously described, the unnamed tributary already channels stormwater from an upstream neighborhood. However, the segment located within the Corsair Homes development and the Wildwood Town Center remain as forested conditions. The channel does exhibit some erosion, likely produced by the upstream culverts. However, it is generally stable due to the surrounding forested conditions. Immediately, downstream of the Wildwood Town Center site, the channel is again enclosed. Overall, it is anticipated that the forested conditions within these two sites provide an immediate benefit to the on-site segment, as well as what is being channeled downstream.

Despite the documented erosion problems, the non-RPW maintains a wooded riparian area measuring over 100 feet on either side of the channel. This can be rare for this area of St. Louis County. The forested riparian corridor suggests a continual source of organic input through interception of leaf litter and coarse woody debris. In general, as the coarse particulate organic matter and fine particulate organic matter is transferred downstream, invertebrate populations migrate with the material. The diversity of aquatic fauna in headwater streams contributes to the biodiversity of a river (Meyer et al. 2007), and as these "drifting" invertebrate populations are being transported downstream, they fit into the complex foodweb of Caulks Creek and the Missouri River.

Lastly, headwater streams have been documented as providing necessary habitat for a variety of birds, mammals, reptiles, and amphibious populations. Because headwater streams have a small catchment area, they are varied and maintain some of the most diverse habitats within a lotic system. Headwater streams are utilized not only by species unique to headwater streams, but are also used by animals requiring headwater streams for certain life stages and/or are utilized by animals that migrate between headwater environments and larger waters (Meyer et al. 2007). With the unnamed tributary providing one of the rare sections of a wooded corridor in this section of St. Louis County, it is likely that the stream channel is heavily utilized by urban wildlife.

The non-RPW is considered as one of the headwater streams of Caulks Creek. The Caulks Creek watershed is an area of St. Louis County that has experienced, and is continuing to experience rapid changes through development. Currently, the unnamed tributary, as it flows through the two project areas, has the capacity to provide positive benefits to the Missouri River, as it is a segment surrounded by forested conditions. The non-RPW contributes hydrology to downstream waters, carry sediments and other pollutants, provide habitat for aquatic life cycles, and provide organic input to downstream waters. Based on these hydrologic connections, it has been determined that the non-RPW maintains a signficiant nexus to Caulks Creek, and subsequently the Missouri River.

LITERATURE CITED

Freeman, M.C., C.M. Pringle, and C. R. Jackson. 2007. Hydrologic Connectivity and the Contribution of Stream Headwaters to Ecological Integrity at Regional Scales. Journal of the American Water Resources Association 43:5-14.

Meyer, J.L., D.L. Strayer, J.B. Wallace, S.L. Eggert, G.S. Helfman, and N.E. Leonard. 2007. The Contribution of Headwater Streams to Biodiversity in River Networks. Journal of the American Water Resources Association. 43: 86-103.

2. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: ☐ TNWs: linear feet width (ft), Or, acres. ☐ Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. ☑ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: 600 linear feet 4 – 10 width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is
	seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands abutting to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Identify water body and summarize rationale supporting determination:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	CTION IV: DATA SOURCES.
A.	SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Eureka and Manchester Quads. USDA Natural Resources Conservation Service Soil Survey. Citation: St. Louis County, Missouri National wetlands inventory map(s). Cite name: Eureka and Manchester Quads. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): 2007 aerial photo prepared by U.S. Army Corps GIS database or Other (Name & Date):
	Previous determination(s). File no. and date of response letter: .

	Applicable/supporting case law:
	Applicable/supporting scientific literature: .
\boxtimes	Other information (please specify): Observed conditions of the stream channel on February 28, 2006.

B. ADDITIONAL COMMENTS TO SUPPORT JD:.